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ABSTRACT

To identify professional education competency needs for vocational agriculture teachers in Ohio, 555 secondary vocational agriculture teachers teaching in the State during 1973-74 were surveyed. The target population was stratified into three groups: (1) four-year college agricultural education majors, (2) four-year college technical agriculture majors, and (3) non-college graduates recruited from business and industry. The study sample included 79 college technical agriculture majors, 43 non-college graduates, and a random sample of 200 professionally prepared teachers. Data were collected through mail questionnaires from 83 percent of the vocational agriculture teachers, 75 percent of the technical agriculture majors, and personal interviews with non-college graduate teachers. Questions covered educational/occupational backgrounds of the respondents, teachers' perceptions of the importance of 256 professional education competencies, and teachers' percepts of their proficiency. The number of competencies most needed by the three groups of teachers varied considerably. In-service education needs for the 256 competency items indicated 23 items for professionally trained teachers, 99 items for technical agriculture majors, and 255 for non-college graduates. It was recommended that Ohio teacher educators/supervisors in agricultural education continue evaluation of competency needs of the three groups in up-dating pre-service and in-service teacher preparation programs. (EA)

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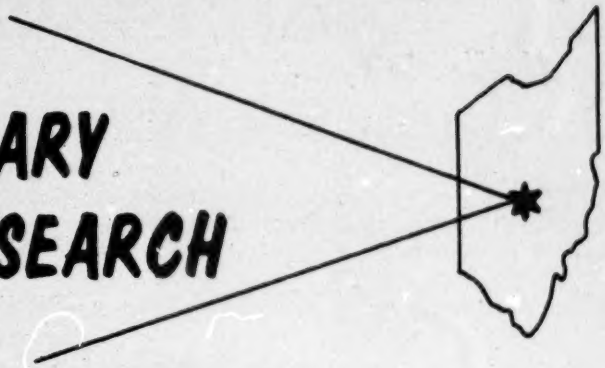

SUMMARY OF RESEARCH

DEPARTMENT OF AGRICULTURAL EDUCATION

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PROFESSIONAL EDUCATIONAL COMPETENCY NEEDS OF THREE GROUPS OF VOCATIONAL AGRICULTURE TEACHERS IN OHIO

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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INTRODUCTION

The concerns of society about schools has caused many educators and administrators to look more closely at the methods and techniques by which teachers are prepared for teaching in elementary and secondary schools. Legislators in several states have mandated that institutions of higher education in their respective states implement Competency/Performance-Based Teacher Education programs. Although the definition of C/PBTE is not totally clear, teacher educators are under pressure to thoroughly examine its feasibility.

The problem of recruiting and preparing persons to teach vocational agriculture at the secondary level is complex. The shortages of vocational agriculture teachers which have occurred in the past (Woodin, 1973) will continue to be with the profession for years to come unless traditional techniques for recruiting teachers are altered.

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The concept of vocational agriculture has broadened to include occupations in all phases of agribusiness, natural resources, and environmental protection. The expansion of vocational agriculture programs has added to the national shortage of qualified vocational agriculture teachers.

Between 1965 and 1974, there was more than a 60 per cent increase in enrollment of students and a 50 per cent increase in number of vocational agriculture teachers in secondary vocational agriculture programs in Ohio (State Department of Education, Division of Vocational Education, Agricultural Education, 1973). During the same period, non-college degree personnel from business and industry (non-professionally prepared teachers) and four-year college technical agriculture majors (non-professionally prepared teachers) were recruited for the purpose of meeting secondary vocational agriculture teacher demands in Ohio. Due to the lack of professional education training, these teachers were required to participate in in-service educational programs for the purpose of acquiring the necessary skills to teach vocational agriculture at the secondary level.

PURPOSE AND OBJECTIVES

The basic purpose of the study was to identify professional education competency needs and related information from the following groups of vocational agriculture teachers in Ohio.

1. Four-year college graduates with a major in agricultural education (professionally prepared teachers).

2. Four-year college graduates with majors in technical agriculture (non-professionally prepared teachers).

3. Non-college graduates recruited from business and industry (non-professionally prepared teachers).

Answers to the following questions were sought for each group of teachers:

1. What are the perceptions of vocational agriculture teachers concerning the importance of selected professional education competencies for conducting successful vocational agriculture programs in secondary schools?

2. What are the perceptions of vocational agriculture teachers concerning their proficiency in selected

professional education competencies for conducting successful vocational agriculture programs in secondary schools?

CONTRIBUTION TO EDUCATION

The need for this study was based upon the consideration of the following factors:

Factor 1. There is a current and future need for skilled agricultural workers in Ohio.

Factor 2. Enrollment in secondary vocational agriculture programs is expanding in Ohio.

Factor 3. There is a future need for competent secondary vocational agriculture teachers in Ohio.

Factor 4. Few studies have focused on the professional preparation needs of four-year college technical agriculture majors entering teaching and the non-college graduate teachers recruited from business and industry.

Factor 5. More background information is needed by teacher educators and supervisors in agricultural education for planning and conducting more relevant pre-service and in-service teacher education programs for the following secondary vocational agriculture teachers: four-year college agricultural education majors, four-year college technical agriculture majors, and non-college graduates recruited from business and industry.

METHODOLOGY

The population of this study included the 555 secondary vocational agriculture teachers who were teaching in high schools and area vocational centers in Ohio during the 1973-74 school year. This target population was stratified into the following groups: (1) four-year college agricultural education majors (professionally prepared teachers), (2) four-year college technical agriculture majors (non-professionally prepared teachers), and (3) non-college graduates recruited from business and industry (non-professionally prepared teachers). A random sample of 200 teachers was taken from the sub-population of the 433 four-year college agricultural education majors (professionly prepared teachers) who were teaching vocational agriculture at the secondary level in Ohio. Because of the sub-population

sizes, the 79 four-year college technical agriculture majors (non-professionally prepared teachers), and the 43 non-college graduates (non-professionally prepared teachers) recruited from business and industry were included in the study.

Data were collected through mail questionnaires from 83 per cent of the vocational agriculture teachers who were four-year college agricultural education majors and 75 per cent from teachers who were four-year college technical agriculture majors. Personal interviews were conducted with the teachers who were non-college graduates, primarily because the researcher felt that this group of teachers would have encountered problems in understanding the terminology in the questionnaires. The researcher also felt that the per cent of non-responses by non-college graduate teachers would have been higher if the mailing technique was used to collect pertinent data. One hundred per cent responses were obtained through personal interviews with teachers who were non-college graduates. The researcher had planned to randomly select teachers from the non-response groups (four-year college agricultural education majors and four-year college technical agriculture majors) for the purpose of conducting personal interviews. If personal interviews could have been conducted with sample groups, comparisons could have been made between the teachers who were surveyed through the mail. Such arrangement would have indicated whether the personal interviews effected the way respondents reacted to professional education competencies listed in the questionnaires. Due to the fact that the researcher had exhausted his budget for the study and because time was a factor, the researcher was unable to perform this task.

Two forms of questionnaires were developed for the study. Part I of the two questionnaires was the same and consisted of questions pertaining to the educational and occupational backgrounds of the respondents. Frequency counts and measures of central tendency were calculated for the descriptive data in Part I of the questionnaires. Part II and III of the questionnaires consisted of professional education competencies identified by Cotrell and other investigators (1972) at the Center for Vocational and Technical Education at The Ohio State University. The 384 professional education competencies were classified under the following 10 categories: (1) program planning, development, and evaluation; (2) instruction planning; (3) instruction-execution; (4) instruction-evaluation; (5) management; (6) guidance; (7) school-community relations; (8) student vocational organization; (9) professional role and development; and (10) coordination. Teacher educators and supervisors in agricultural education in Ohio used the Q-sort technique (Stephenson: 1953) in identifying which of the 384 randomly ordered professional education competencies were most

needed by vocational agriculture teachers. Mean scores for teacher educators and supervisors and combined mean scores (teacher educators and supervisors) were obtained. The researcher then ranked the 384 competencies in terms of combined mean scores from high to low. The 256 competencies with the highest combined mean scores were included in the study and the 128 competencies with the lowest combined mean scores were deleted. The rationale for deleting the 128 competencies with the lowest combined mean scores was that the 256 competencies with the highest combined mean scores were representative of the competencies needed by vocational agriculture teachers in the 10 categories. It was also recognized that a shorter instrument would increase the percentage of usable questionnaires.

The researcher randomly ordered the 256 competencies into the two forms of the instruments. Part II of the questionnaire was designed to identify the teachers' perceptions of the importance of professional education competencies in being or becoming a successful teacher of vocational agriculture at the secondary level. A four-point scale was used as follows: Four equaled "great importance," three equaled "above average importance," two equaled "some importance," and one equaled "little or no importance." Part III of the questionnaire was designed to identify teachers' perceptions of their proficiency in performing professional education competencies. A four point value scale was used as follows: One equaled "high degree of proficiency," two equaled "above average proficiency," three equaled "some proficiency," and four equaled "little or no proficiency." Part II of the instrument "A" included 128 competency items that were rated on importance and Part III included 128 competency items that were rated on level of proficiency and vice versa for instrument "B". Each teacher rated 128 of the competencies on importance and 128 competencies on level of proficiency. Each group of teachers was randomly subdivided with one-half receiving instrument "A" and one-half receiving instrument "B". Mean scores were calculated to determine importance and proficiency ratings of professional education competencies in Part II and III of the questionnaires as perceived by each group of teachers studied. The professional education competency in-service needs were ascertained by adding the mean score ratings of importance and proficiency by each group of vocational agriculture teachers.

MAJOR FINDINGS

Perceptions of Importance

1. Four-year college agricultural education majors rated 72.6 per cent of the 256 professional

education competencies above average importance (3.00) or higher. Four-year college technical agriculture majors rated 87.7 per cent of the competencies 3.00 or higher, and non-college graduates rated 92.2 per cent of the professional education competencies 3.00 or higher. See the Appendix for the most important professional education competencies in each category as perceived by the three groups of vocational agriculture teachers in Ohio.

2. The same competencies were consistently rated high by all three groups.

3. Competencies within the areas of management, guidance, and professional role and development were most frequently rated 3.5 or higher by four-year college agricultural education majors. Competencies within the areas of program planning, development, and evaluation; school-community relations; and student FFA organization were most frequently rated 2.9 or below by this group of teachers.

4. Competencies within the areas of management, guidance, and professional roles and development were also most frequently rated 3.5 or higher by four-year college technical agriculture majors. Competencies within the areas of evaluation of instruction, school-community relations, and student FFA organization were most frequently rated 2.9 or below by four-year college technical agriculture majors.

5. The non-college graduates rated 50 per cent or more of the competencies 3.5 or higher (4 = great importance) within the areas of guidance, planning of instruction, coordination, management, and execution of instruction. Competencies within the areas of evaluation of instruction; school-community relations, and student FFA organization were most frequently rated 2.9 or below by non-college graduates.

Perceptions of Degree of Proficiency

1. Four-year college agricultural education majors rated their degree of proficiency in 95.7 per cent of the 256 professional education competencies with a mean score of 2.4 (2 = above average proficiency) or lower (a lower rating indicates a higher degree of proficiency). Four-year college technical agriculture majors rated their degree of proficiency in 90.2 per cent of the 256 competencies with a mean score of 2.4 or lower, while non-college graduates rated

their degree of proficiency in 4.7 per cent (12 competencies) of the total number of competencies with a mean score of 2.4 or lower.

2. Twenty-seven out of 44 (61.4 per cent) of the competencies rated 1.9 or lower by four-year college technical agriculture majors were in the list of 61 competencies rated 1.9 or lower by four-year college agricultural education majors.

3. Four-year college agricultural education majors claimed high proficiency in the competency areas of student FFA organization, guidance, and professional role and development. This group of teachers felt least proficient in the areas of program planning, development, and evaluation, and coordination.

4. Four-year college technical agriculture majors felt most proficient in the areas of guidance, management, and professional role and development. These vocational agriculture teachers expressed the least proficiency in the competency areas of coordination, program planning, development, and evaluation, and student FFA organization.

5. Non-college graduates did not rate their proficiency in performing any of the professional education competencies 1.9 (2 = above average proficiency) or lower (a lower rating indicated a higher degree of proficiency). The non-college graduates rated their degree of proficiency in 46.1 per cent (118 competencies of the total 256 competencies to be between a mean score of 2.5 and 2.9 (3 = some proficiency). One hundred and twenty-six (49.2 per cent) of the 256 competencies were perceived by non-college graduates to be in the proficiency mean score rating of 3.00 or higher (4 = little or no proficiency).

Need for Inservice Education

1. As may be noted in the following table, the number of professional education competencies most needed by the three groups of teachers varied considerably. An in-service education need indicator was computed by adding the importance and proficiency values. The four-year college agricultural education majors showed an in-service education need in 23 of the 256 competency items, as contrasted with the four-year college technical agriculture majors showing

Table 1

IN-SERVICE PROFESSIONAL EDUCATION COMPETENCY NEEDS RATED 5.5 OR HIGHER BY THREE GROUPS OF VOCATIONAL AGRICULTURE TEACHERS

Competency Area	Total Competencies Per Area	Ag. Ed. Majors		4-Yr. Coll. Tech. Ag.		Non-Coll. Grads.	
		No.	%	No.	%	No.	%
I Program Planning, Development, and Evaluation	33	1	3	14	42	32	97
II Planning of Instruction	23	1	4	10	43	23	100
III Execution of Instruction	36	1	3	6	17	36	100
IV Evaluation of Instruction	20	1	5	6	30	20	100
V Management	27	3	11	12	44	27	100
VI Guidance	22	2	9	7	32	22	100
VII School - Community Relations	19	-	-	5	26	10	100
VIII Student FFA Organization	17	-	-	3	18	17	100
IX Professional Role and Development	15	2	13	4	27	15	100
X Coordination	44	12	27	32	73	44	100
TOTAL	256	23	8.9	99	38.7	255	99.6

need in 99 competencies, the non-college graduates showing need in 255 of the 256 competencies.

2. The four-year college agricultural education majors were in need of in-service professional education training in the areas of coordination, management, and professional role and development. The four-year college technical agriculture majors needed training in coordination, management, planning of instruction, and program planning, development, and evaluation. Non-college graduates had an urgent need for in-service professional education training in all 10 competency areas.

RECOMMENDATIONS

Four-Year College Agricultural Education Majors

It was recommended that:

1. Ohio's teacher educators and supervisors in agricultural education continue to plan and conduct pre-service programs for individuals desiring to obtain a four-year college degree in agricultural education and who desire to be employed as vocational agriculture teachers at the secondary level.

2. Courses should be designed to develop those professional education competencies rated highest in importance by four-year college agricultural education majors. Those that should have the highest priority include:

   a. Demonstrate a regard for and an interest in students and their family

   b. Uphold acceptable standards of student behavior in vocational agriculture classrooms and laboratories by carrying out approved disciplinary action

   c. Conduct home visits

   d. Maintain working relationship with the school administration and faculty

   e. Acquire new occupational skills and information needed to keep pace with technological advancement in vocational agriculture

f. Plan the introduction, content, learning experiences, and summary of a lesson

g. Develop a procedure to insure students' safety and protection

The development of all competencies rated above average in importance by four-year college agricultural education majors in each competency area should be the minimum goal for preparing four-year college agricultural education majors to teach vocational agriculture at the secondary level.

4. Consideration should be given to organizing both pre-service and in-service education courses and/or class sections on a sequential basis in the most important competency areas.

5. Ohio's teacher educators and supervisors in agricultural education should continue to plan and conduct in-service courses to develop those professional education competencies with the highest in-service education need indicator value for teachers who were four-year college agricultural education majors (professionally prepared teachers). Competencies that should have the highest priority include:

   a. Identify individual learning experiences for students based on their individual abilities while teaching in the classroom or school laboratory

   b. Provide safety apparel and devices for vocational agriculture students assigned to hazardous equipment

   c. Establish criteria for evaluating the training potential of a business or industry

   d. Convince an employer to provide a training station for cooperative vocational agriculture and develop a systematic training plan with the cooperating employer and/or the on-the-job instructor

   e. Assist the cooperating employer in verifying the legality of employing a student learner in a hazardous occupation and develop a procedure to insure student's safety and protection in the training station.

f. Assist the student-learner in on-the-job training orientation

g. Assess the student-learner's performances with the assistance of the on-the-job instructor and conduct termination procedures when conditions demand it

h. Seek Opportunities for self-evaluation of instruction

Four-Year College Technical Agriculture Majors

It was recommended that:

1. Ohio's teacher educators and supervisors in agricultural education should continue to plan and conduct in-service courses to develop those professional education competencies with the highest in-service need indicator value for four-year college technical agriculture majors (non-professionally prepared teachers).

2. Special attention should be given to organizing in-service courses on a sequential basis in the most important in-service need competency areas.

3. The development of all competencies with an in-service need indicator value of 5.5 or higher (6 = above average importance and some proficiency) in each competency area should be the minimum goal for improving the teaching skills of teachers who were four-year college technical agriculture majors (non-professionally prepared teachers). Competencies that should have the highest priority include:

   a. Plan the annual agenda to be considered by the advisory committee

   b. Collect occupational data from employers to identify vocational agriculture needs

   c. Analyze occupations with assistance of employers and labor representatives

   d. Establish criteria for evaluating the training station potential of a business or industry

e. Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation and develop a procedure to insure student's safety and protection in the training station.

f. Examine the student-learner's progress reports to determine future on-the-job training experiences and related instruction, and to encourage the on-the-job instructor to follow the training plan in promoting experiences for the student-learner

g. Obtain suggestions from the on-the-job instructor to give the selection of lessons for related instruction

h. Conduct termination procedures for the on-the-job training for the student-learner when conditions demand it

Non-College Graduates

It was recommended that:

1. If non-college graduates recruited from business and industry (non-professionally prepared teachers) is to be a continuous source for meeting vocational agriculture teacher demand in Ohio, Ohio's teacher educators and supervisors in agricultural education should continue to plan and conduct in-service courses and/or class sections to prepare these individuals for teaching vocational agriculture.

2. Ohio's teacher educators and supervisors in agricultural education should give special attention to organizing and conducting a specialized in-service program so that teachers who were non-college graduates (non-professionally prepared teachers) will be proficient in performing the 256 professional education competencies at the above average proficiency level. Competencies that should have the highest priority include:

   a. Structure and devise a filing system for instructional materials, records and report forms

   b. Develop a systematic training plan with the cooperating employer and/or the on-the-job instructor and check the student-learner's progress with the on-the-job instructor and other training station personnel

c. Review student progress and/or achievement records to assess effectiveness of instruction

d. Provide remedial work for slow learners and direct student study of information and assignment sheets

e. Maintain record of safety instruction presented in compliance with safety laws and regulations

f. Arrange laboratory work areas and storage space to facilitate student work performance and to schedule laboratory equipment for maximum utilization by students

g. Plan the introduction, content and summary of a lesson

h. Devise laboratory performance tests and rating sheets

i. Uphold acceptable standards of student behavior in vocational agriculture classrooms and laboratories by encouraging students to exercise self-discipline

j. Assist students in advancing within the available degrees in the FFA organization and provide advice for entries in state and national FFA organizations

k. Supervise social and educational activities for the student FFA organization

General Recommendation

Ohio's teacher educators and supervisors in agricultural education should continue to evaluate the professional education competency needs of the three groups of vocational agricultural teachers studied so that pre-service and in-service teacher preparation programs can be up-dated according to teacher needs.

REFERENCES

Chabotar, Kent J., Sederburg, William A., and Lad, Lawrence J., "Implementing Educational Accountability: The Michigan Experience," Report No. 31. Center for Rural Manpower and Public Affairs, Michigan State University, Lansing, Michigan, November, 1973.

Cotrell, Calvin J., et al. "Model Curricula for Vocational and Technical Education," Report No. IV, A Foundation for Performance-Based Instruction. Columbus, Ohio: The Ohio State University, August, 1972.

_____, "Model Curricula for Vocational and Technical Education," Report No. V, General Objectives Set, II. Columbus, Ohio: The Ohio State University, September, 1972.

Hunt, Jon H., "Accountability at the Classroom Level," American Vocational Journal. Vol. 50, No. 3 (March, 1975), p. 28.

Kaufman, Jacob J., "Accountability: A Rational Approach to Education," American Vocational Journal. Vol. 48, No. 3 (March, 1973), p. 28.

Moore, Eddie Albert. "Professional Education Competency Needs of Three Groups of Vocational Agriculture Teachers in Ohio." Unpublished Ph.D. dissertation, Ohio State University, 1974.

Phi Delta Kappan. Volume LV, No. 5 (January, 1974) pp. 289-367.

Rabben, Kenneth J. "GAO Report on Voc Ed. Stirs Controversy," American Vocational Journal. Vol. 50, No. 3 (March, 1975), p. 36.

Rhodes, James A. Alternative to a Decadent Society. Indianapolis, Indiana: Howard W. Sams and Company, Inc., 1969.

State Department of Education, Division of Vocational Education, Agricultural Education Service, Report of Programs, Columbus, Ohio.

Woodin, Ralph J., Supply and Demand for Teachers of Vocational Agriculture in 1973, Department of Vocational-Technical Education, University of Tennessee, Knoxville, Tennessee.

APPENDIX

The upper one-half of the professional education competencies in each category as rated in importance by the three groups of vocational agriculture teachers in Ohio are listed. Competencies in each category were ranked from highest to lowest based on the combined mean scores for the three groups of teachers.

A. Program Planning, Development and Evaluation (Thirty-three competencies in this category were included in the study).

1. Identify the competencies needed for entry into occupation
2. Determine the occupations for which training is to be offered in the vocational agriculture program
3. Assist in the identification of the school's vocational agriculture purposes and goals
4. Identify the skill, knowledge, and attitudes required for the performance of each task included in a vocational agriculture offering
5. Assess the relevancy of the vocational agriculture offerings
6. Analyze long-range needs for the offerings of the vocational agriculture program
7. Describe the occupational standards of performance for each task in an occupation
8. Collect occupational data from employers to identify vocational agriculture needs
9. Recommend a vocational agriculture program based on findings of the community survey
10. Assist in preparing the long-range program plans for vocational agriculture
11. Collect student occupational interest data to identify vocational agriculture needs
12. Communicate the date, place, and agenda for the advisory committee meetings to all persons concerned
13. Write student performance objectives for the vocational agriculture offering
14. Specify the long-range facility, equipment and supply needs for the vocational agriculture program
15. Assist in writing general objectives for the vocational agriculture program offerings
16. Establish communication with employer representatives who will be involved in a community survey

17. Analyze long-range needs for the offerings of the vocational agriculture program

B. Planning of Instruction (Twenty-three competencies in this category were included in the study).

1. Plan the content of a lesson
2. Determine student needs and interests
3. Correlate unit content with on-the-job and/or laboratory experiences
4. Obtain textbook, references, and other instructional material
5. Plan student learning experiences for a lesson
6. Select tools and/or equipment for a lesson
7. Develop original instructional materials such as individualized related assignment sheets, transparencies, and charts
8. Plan the introduction of a lesson
9. Select teaching techniques for a lesson
10. Assemble consumable supplies for instructional purposes
11. Identify the student performance objectives for a lesson
12. Write a lesson plan

C. Execution of Instruction (Thirty-six competencies in this category were included in the study).

1. Direct student laboratory experience
2. Illustrate with models and real objects
3. Present a concept or principle through a demonstration
4. Demonstrate a manipulative skill
5. Reinforce learning
6. Enrich instruction to challenge the abilities of the more capable student
7. Conduct field trips
8. Direct students in preparing laboratory work or job plans
9. Direct students in applying problem-solving techniques
10. Employ question techniques
11. Employ oral questioning techniques
12. Establish frames of reference to enable the students to understand a situation from several points of view
13. Present information by use of individualized instruction
14. Introduce a lesson
15. Acknowledge a student verbal and nonverbal clues

16. Present information with the assistance of a resource person
17. Present information with analogies
18. Present information with slides

D. Evaluation of Instruction (Twenty competencies in this category were included in the study).

1. Review student progress and/or achievement records to assess effectiveness of instruction
2. Determine student's grade based on related instruction and laboratory or on-the-job experience
3. Establish criteria for student performance
4. Devise laboratory performance tests
5. Appraise student's performance in relation to student performance objectives
6. Appraise student's products according to occupational performance standards
7. Seek opportunities for self-evaluation of instruction
8. Administer teacher-made tests
9. Engage in cooperative evaluation of achievement with students
10. Evaluate individualized assignments completed under directed study

E. Management (Twenty-seven competencies in this category were included in the study).

1. Uphold acceptable standards of student behavior in vocational agriculture classrooms and laboratories
2. Carry out approved disciplinary action when warranted
3. Provide approved safety apparel and devices for hazardous equipment
4. Control outbursts of fighting and aggressive behavior
5. Encourage students to exercise self-discipline
6. Uphold school standards of expected student behavior
7. Maintain a record of safety instruction presented in compliance with safety laws and regulations
8. Identify new tools and/or equipment needed for the academic year
9. Formulate with students acceptable standards of behavior in vocational agriculture classrooms and laboratories

10. Schedule laboratory equipment for maximum utilization by students
11. Prepare purchase requests for approved vocational agriculture equipment and supplies
12. Devise a filing system for instructional materials
13. Arrange laboratory work areas and storage space to facilitate student work performance
14. Arrange layout of the vocational agriculture laboratory to stimulate the occupational environment

F. Guidance (Twenty-two competencies in this category were included in the study).

1. Demonstrate a regard for and an interest in students as individuals
2. Demonstrate personal concern for the student and his family
3. Maintain an open door policy for student consultation
4. Develop constructive working relationships among students
5. Conduct a conference with a student
6. Communicate with prospective and continuing students during the summer
7. Present information to students on occupational opportunities
8. Recognize potential problems of students
9. Determine student's background and environment
10. Assist students in developing good study habits
11. Assist graduating students in preparing for interviews with potential employers

G. School-Community Relations (Nineteen competencies in this category were included in the study).

1. Maintain working relationships with the school administration and faculty
2. Maintain working relationships with the school supporting staff through cooperation and mutual effort
3. Plan the school-community relations activities for the vocational agriculture program
4. Obtain information from parents relative to their expectations of the vocational agriculture program
5. Conduct an open house to familiarize members of the school and community with activities of the vocational agriculture program.

6. Procure clearance from the school administration to conduct school-community relations activities related to the vocational agriculture program
7. Obtain informal feedback on the vocational agriculture program through contacts with individuals in the school and community
8. Acquire information from members of the community power structure (e.g., political, social and economic pressure groups) regarding their expectations of the vocational agriculture program
9. Serve in a community civic, service, or social organization to improve the image of the vocational agriculture program
10. Speak to school and community groups on the vocational agriculture program

H. Student FFA Organization (Seventeen competencies in this category were included in the study).

1. Conduct an organizational meeting for the student FFA organization
2. Assist students with the financial management of the student FFA organization
3. Acquaint prospective members and their parents with the purposes, activities, and values of the student FFA organization.
4. Participate in district, state, regional and national activities of the student FFA organization
5. Conduct a leadership training session for the officers of the student FFA organization
6. Assist students in developing a yearly program of work for the student FFA organization
7. Orient students to the student FFA organization
8. Supervise social and educational activities for the student FFA organization
9. Provide advice for student entries in the state and national student FFA organizations

I. Professional Role and Development (Fifteen competencies in this category were included in this study).

1. Acquire new occupational skills and information needed to keep pace with technological advancement in vocational agriculture
2. Maintain the ethical standards expected of a professional educator
3. Select the teaching position which is in keeping with personal and professional abilities and limitations

4. Keep up-to-date through reading professional literature
5. Maintain professional certification through enrolling in graduate, extension, and in-service education programs
6. Exchange observational visits, innovations and ideas with others in the profession
7. Consult regularly with the student teacher regarding planning, implementing and evaluating teaching
8. Promote the attainment of the goals of the teaching profession

J. Coordination (Forty-four competencies in this category were included in the study).

1. Develop a procedure to insure student's safety and protection in the training station
2. Check the student-learner's progress with the on-the-job instructor and other training station personnel
3. Maintain good working relationships with training station personnel
4. Evaluate the student-learner's work qualities and habits on the job
5. Evaluate the quality of the on-the-job training received by the student-learner
6. Assess safety provisions of the facilities and equipment of the prospective training stations
7. Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation
8. Develop a systematic training plan with the cooperating employer and/or the on-the-job instructor
9. Assist the student-learner in on-the-job training orientation
10. Prepare the student-learner for an interview with the cooperating employer and training station personnel
11. Assist the student-learner in the solution of problems related to on-the-job training
12. Control student-learner absenteeism from school and on-the-job training
13. Develop a plan for supervision of on-the-job training
14. Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation

15. Examine the student-learner's progress reports to determine future on-the-job training experiences and related instruction
16. Develop a training agreement between student-learner, parent, school and cooperating employer
17. Identify prospective cooperative employers to provide on-the-job training stations
18. Assess the student-learner's performance with the assistance of the on-the-job instructor
19. Match a student-learner's unique characteristics with an appropriate training station
20. Obtain suggestions from the on-the-job instructor to guide the selection of lessons for related instruction
21. Check the student-learner's progress in acquiring skills on the job
22. Evaluate the student-learner's personal traits and characteristics on the job

SUMMARY OF RESEARCH SERIES

The movement towards competency-based teacher education represents the convergence of several accelerating trends. An initial step in developing programs in response to this trend is tentative competency identification. In this study the authors specifically rate competencies as a basis for later focused training. Perceptions of three groups of teachers concerning the importance of and their degree of proficiency in specific competencies are obtained.

This summary is based on a doctoral dissertation completed by Eddie A. Moore under the direction of Ralph E. Bender. Dr. Moore is currently the project coordinator, vocational and technical agriculture research project, Muskegon County Wastewater Management System, Michigan and Dr. Bender is professor and chairman, Department of Agricultural Education, The Ohio State University. The authors are recognized for their scholarship in preparing this summary. Special appreciation is due Roland L. Peterson, University of Minnesota and James B. Hamilton, The Center for Vocational Education, The Ohio State University for their critical review of this manuscript prior to its publication.

Research has been an important function of the Department of Agricultural Education since it was established in 1917. Research conducted by the Department has generally been in the form of graduate theses, staff studies and funded research. It is the purpose of this series to make useful knowledge from such research available to practitioners in the profession. Individuals desiring additional information on this topic should examine the references cited in the bibliography.

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